

POSTED
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REBUTTAL TESTIMONY

OF

CARL B. KLEIN

ON BEHALF OF

SOUTH CAROLINA ELECTRIC & GAS COMPANY

DOCKET NO. 2002-002-E

Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND POSITION.

A. My name is Carl Klein. I am Manager of Resource Commitment and Risk Management at SCANA Energy Marketing, Inc., 110 Gateway Corporate Boulevard, Columbia. SCANA Energy Marketing acts as agent for South Carolina Electric and Gas Company (SCE&G) in the business of purchasing and selling bulk power in the wholesale market.

Q. DESCRIBE YOUR EDUCATIONAL BACKGROUND AND YOUR BUSINESS EXPERIENCE.

A. I have a bachelor's degree in English from Davidson College (1966), a master's degree in English from Duke University (1972), and a master's degree in Economics, with a minor in Statistics, from North Carolina State University in 1982, with additional coursework in economics and econometrics through 1984.

I was employed in May, 1984, in the Generation Planning group of the System Planning Department of SCE&G, where I produced seasonal peak demand forecasts for generation expansion planning, among other duties. In 1989 I was named acting Supervisor of Generation Planning, and was confirmed in that role later that year. I continued in that role after Generation Planning was removed to Corporate Planning in 1994.

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1 In 1996, I became Supervisor of the Operations Planning group in SCE&G's
2 Transmission Planning and System Control Department, where I oversaw the engineering
3 processes involved in daily dispatch of SCE&G's plants for economics and reliability and
4 the accounting processes involved in power transactions with other utilities and with non-
5 utility power marketers and also purchases or sales of transmission services. During this
6 period SCE&G developed the accounting practices to which I refer in my testimony. In
7 July 2001, the engineering aspects of the Operations Planning work were assigned to
8 SCANA Energy Marketing, at which time I assumed my current position. The engineers
9 in my group still support, as they did before, the transmission system operators in the
10 SCE&G System Control Center and SCANA Energy Marketing's power marketers,
11 acting as purchasing and selling agents for SCE&G. We provide, among other things,
12 up-to-date input information for avoided cost determinations and perform the modeling
13 necessary for avoided cost studies over extended periods.

14 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

15 A. The purpose of my testimony is to demonstrate why SCE&G concurs in and supports the
16 analysis of Mr. Watts regarding the need for and reasonableness of the fuel cost proxy
17 outlined in his testimony and to rebut any inference in Ms. Cherry's testimony that the
18 stipulation entered into by the Consumer Advocate and CP&L in Docket No. 2002-1-E
19 might be appropriate for this proceeding.

20 **Q. DESCRIBE THE PROCESS PURSUANT TO WHICH SCE&G MAKES ITS**
21 **DECISIONS TO PURCHASE POWER AND HOW IT EFFECTUATES SUCH**
22 **PURCHASES.**

23 A. The decision to make a purchase of power may be as simple as comparison of a delivered
24 cost to an avoidable generation cost from a table or graph or as elaborate as the

1 preparation of a full resource dispatch modeling exercise, depending on the immediacy of
2 the purchase decision and the horizon over which the purchased power will be received.

3 In every case, the cost comparison is made in the context of the expectation for hourly
4 loads over the purchase horizon and knowledge of the units planned to be on line or
5 available for dispatch. In the most immediate case, a marketer on the hourly desk will
6 receive price, quantity, and delivery information about an opportunity purchase for the
7 following hour. The marketer will have real-time information about SCE&G's system
8 load and about units on line and their loading levels. He or she can see which units have
9 the capability to load up further, or to start, and can consult graphs and tables of current
10 production cost information—the daily value of power from Fairfield pumped-storage
11 hydro, fuel and heat rates for various thermal units, variable operating costs and
12 emissions-related costs for various thermal units—in order to estimate the cost to produce
13 the energy that might be supplied by purchase. The marketer may also consult a resource
14 commitment engineer, if time permits, to verify production information. If the cost of the
15 power purchase delivered into SCE&G's transmission system is found to be less than the
16 cost of producing it from a system resource, then the marketer makes the purchase and
17 records, among other transaction information, the avoided production cost. On rare
18 occasions, when all system resources are already committed, the basis for the recorded
19 avoided cost will be another purchase.

20 In a more elaborate case, where the purchase horizon extends over many hours or even
21 days and the purchase decision is not immediate the task of estimating the avoidable cost
22 (and hence the ceiling value for the purchase price) falls to resource commitment
23 planning engineers, who use our standard commitment planning model. The planner will

1 set up the model over the study horizon, or longer, and prepare a base case dispatch plan
2 to the forecast loads. The change case that follows will dispatch the same resources to
3 hourly loads that have been reduced by the hourly MW amount of the proposed purchase
4 over the purchase horizon. The difference in the total production costs resulting from the
5 two runs is the total avoidable production cost over the purchase. Dividing that total by
6 the total energy that would be supplied by the purchase yields an avoidable cost in dollars
7 per megawatt-hour, the standard energy pricing measure.

8 **Q. IN MAKING THIS ANALYSIS, WHAT INFORMATION DO YOU HAVE**
9 **REGARDING THE COST OF FUEL REQUIREMENT FOR THE GENERATION**
10 **OF PURCHASED POWER?**

11 A. SCE&G's marketers generally have no information about the fuel cost of any power
12 offered for their purchase. The information SCE&G must know to evaluate the offer
13 includes the price to acquire the energy and where SCE&G will receive possession of the
14 energy. If it is received somewhere other than into our transmission system, SCE&G
15 must know what it will cost to transmit the energy from the point of receipt to our
16 transmission system.

17 **Q. IF SUCH FUEL COST INFORMATION IS NOT AVAILABLE, WHY IS IT NOT**
18 **READILY OBTAINABLE?**

19 A. Our power marketers deal directly with power marketers for other utilities or other
20 wholesale power market participants. Those marketers may or may not have information
21 about the fuel cost of any power they offer, but if they have such information they are
22 likely to consider it proprietary and confidential information.

1 Moreover, marketers often will not know the fuel cost of power they offer. A marketer
2 for an agency without any generation of its own can offer only power it has purchased
3 elsewhere. The price to acquire that power will be known, but the fuel cost incurred in
4 producing it will not be known. Even a marketer for a utility may be reselling power it
5 has purchased elsewhere, instead of power it is generating. In that case the offering
6 marketer will have no way of knowing what the underlying fuel cost is.

7 **Q. HAS THIS LACK OF INFORMATION ALWAYS BEEN THE CASE OR IS IT A**
8 **CONSEQUENCE OF OTHER CIRCUMSTANCES?**

9 A. Up until several years ago economy power transactions, when they occurred, were almost
10 exclusively hour-to-hour transactions between neighboring vertically integrated utilities,
11 and many were conducted on a “split-the-savings” formula. Each utility would identify
12 its production cost, and the cheaper would send power to the other for its cost plus half
13 the difference between its cost and the other’s avoided cost. It was a common practice in
14 those days for utilities making such sales to disclose their fuel costs to their
15 counterparties.

16 Then the Federal Energy Regulatory Commission (FERC) undertook several initiatives to
17 open the wholesale power business to greater competition, to encourage new entrants
18 such as merchant generation and wholesale power marketers and brokers, and to prevent
19 utility-affiliated power sales from enjoying any competitive advantage because of its
20 affiliation. FERC created the Negotiated Market Sales Tariff under which wholesale
21 bulk power sales are now almost exclusively transacted. Among other effects, utility-
22 affiliated power marketers were separated from other bulk power functions and required
23 to conduct themselves and their business comparably to other power marketers with no

1 utility affiliation. Information about costs became private competitive information, and
2 prices replaced costs in communications about any potential transactions. Many market
3 participants did not and do not keep track of components of costs, such as fuel cost, to
4 serve individual transactions. Other participants regard such information as private and
5 confidential information, not to be disclosed to any customer or competitor.

6 **Q. SINCE THE FUEL COSTS ARE NOT DIRECTLY ASCERTAINABLE, WHAT,**
7 **IF ANYTHING, WAS DONE TO INSURE REGULATORY COMPLIANCE AND**
8 **A DETERMINATION THAT THE COMPANY'S POWER PURCHASING**
9 **PRACTICES WERE PRUDENT?**

10 A. Approximately five years ago, SCE&G made direct requests for fuel information on
11 invoices from its counterparts. Some utilities were willing to provide fuel information,
12 but other utilities and all independent power marketers replied that they were either
13 unable or unwilling to provide this information. SCE&G concluded at that time that such
14 information was generally not going to be forthcoming and that, even if it were to be
15 provided, its accuracy could not be relied upon. Consequently, taking guidance from an
16 obligation to minimize "the total cost of providing service," SCE&G along with the other
17 jurisdictional utilities proposed to the Commission Staff that "fuel costs related to
18 purchased power" be determined by comparing the cost to acquire and receive any
19 potential purchase of power to serve its retail customers with the cost to produce that
20 power. SCE&G undertook to determine and record the avoided cost for every purchase
21 made and to maintain those records for audit and verification. Since that time, Staff
22 auditors have reviewed all the monthly summarized data and the hourly entries for many
23 days and months during the audit processes associated with every Fuel Review, and have

1 recommended recovery for all costs for purchased power which were found to be less
2 than the production costs avoided by the purchases. The Commission has accepted these
3 costs for recovery.

4 **Q: THE TESTIMONY OF MS. CHERRY AND MR. WATTS REFER TO CP&L'S**
5 **RECENT FUEL CASE AND THE FACT THAT THE CONSUMER ADVOCATE**
6 **AND THE COMPANY STIPULATED THAT FUEL COSTS MAKE UP 60% OF**
7 **THE COST OF PURCHASED POWER. DO YOU CONSIDER THIS TO BE A**
8 **REASONABLE ESTIMATED STANDARD FOR ACTUAL COSTS FOR SCE&G?**

9 A: I am not in a position to comment on the reasonableness of the stipulation by CP&L and
10 the Consumer Advocate on a particular percentage of purchased power costs as a stand-in
11 for fuel costs, but I do not believe that CP&L receives any more or better information
12 about the fuel component of the costs of its purchases than SCE&G does. To the extent
13 that the stipulated percentage is derived from any reported data, the data are not subject to
14 anyone's tests or verification. The stipulation may reflect practices that CP&L employs
15 with regard to its retail regulation in North Carolina, and may be favored by CP&L for
16 that reason. But SCE&G believes that the controls in its purchasing and accounting
17 processes assure that its submitted purchased power costs save its ratepayers from costs
18 even higher, and so it is at least as reasonable to propose recovery of those expenses. We
19 believe they are "fuel costs related to purchased power" vis-a-vis the Company's "cost of
20 fuel" for generation and thus an appropriate avoidable fuel cost proxy, as described by
21 Mr. Watts. The quotations are from S.C. Code Ann. §58-27-865 (2000 Cum.Supp.)

22 **Q. DOES SCE&G's PRACTICE PROVIDE ANY BENEFITS AND PROTECTIONS**
23 **TO CONSUMERS? IF SO, HOW?**

1 **A.** SCE&G's implementation of the method of comparing delivered prices of purchased
2 power to avoidable production costs yields frequent benefits to its consumers. We
3 determine and record the avoided cost at the time any purchase decision is made, not at
4 some later time or date. That requirement is often burdensome because many decisions
5 have to be made quickly and the computation and recording take time when time is often
6 tight. But as a consequence, our duty marketers continually keep current not only on
7 what prices there are out in the market, but also on what our immediate production cost
8 structure is. That continual grasp allows us to act quickly to make good purchases and at
9 the same time keep uneconomical purchases to a minimum.

10 Our methods of recording avoided costs provide protection to consumers. The immediate
11 avoided cost records made at the hourly desk appear on the same worksheets as all the
12 purchase accounting information. All the data are rolled up in electronic spreadsheets,
13 but in rows that are specific to each purchase in each hour, so that entries, including
14 avoided costs, can be traced back to the initial records as well as rolled up into daily or
15 monthly summaries. Company and Staff auditors are able to follow not only the
16 summarized cost data but also the summarized avoided cost data back to the original
17 source documents.

18 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

19 **A.** Yes, it does.

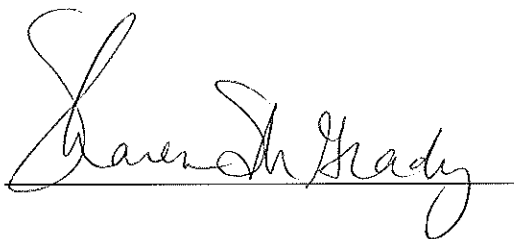
BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA

DOCKET NO. 2002-2-E

IN RE: South Carolina Electric & Gas Company -) CERTIFICATE OF
Annual Review of Base Rates for Fuel Costs) SERVICE

I hereby certify that on the 17th day of April, 2002, a copy of South Carolina Electric & Gas Company's REBUTTAL TESTIMONY OF CARL B. KLEIN was served upon the Consumer Advocate by sending a true copy via facsimile 803-734-4287 to the attention of the following person:

Ms. Hana Williamson
Staff Attorney
Post Office Box 5757
Columbia, SC 29250-5757

A handwritten signature in dark ink, appearing to read "Lauren Shady", written over a horizontal line.

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COMMISSION